# Hawke BRC Software (BRC) - Advanced software designed to ensure the shooter is always on target.

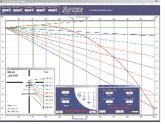
SR reticles have been designed to work with your rifle's trajectory. They can be used in conjunction with the Hawke Ballistic Reticle Calculator (BRC) PC compatible Software. This enables easy set-up of the additional aim points, and other advantages such as flip-up lens cover print-outs and trajectory graphs

The BRC works with all calibers and on all magnifications. It is simple to use and free to download.

To download this software simply visit www.hawkeoptics.com

#### With BRC you can

- Choose a preferred preset set-up suitable for your calibre
- Choose a preferred reticle for your shooting requirements
- Adjust the presets to work either in metric or standard (imperial)
- Experiment with zero distances, muzzle velocity and magnification
- Plot your rifle trajectory and find aim points
- Carry our advanced range finding calculation.



Trajectory Graphs calculate aim points rangefind calculations



Flip-up cover aim - point print -outs

### Maintaining you riflescope:

Your scope is a precision instrument that deserves a high level of care. **Do not** attempt to disassemble or clean the scope internally.

Keep the protective lens covers in place when the scope is not in use.

The external optical surfaces should be wiped clean occasionally with the lens cloth provided or an optical quality lens paper. Remove any external dirt or sand with high pressure air and a soft brush to avoid scratching the lens finish.

Wipe the scope with a damp cloth, then with a dry cloth, then go over the metal section of the scope with a silicone cloth in order to protect the scope against corrosion.

Always store the scope in a moisture-free environment. Avoid storing the scope in places such as the passenger compartments of vehicles on hot days as the high temperatures could adversely affect the lubricants and sealants. A vehicles boot, a gun cabinet or a cupboard is preferable. Never leave the scope where direct sunlight can enter either the objective or the eyepiece lens as damage may result from the concentration (burning effect) of the suns rays.

# WARNING: UNNECESSARY RUBBING OR USE OF A COARSE CLOTH MAY CAUSE PERMANENT DAMAGE TO LENS COATINGS

Congratulations on the purchase of your new HAWKE Riflescope - Please read these instructions carefully before use.





# SIDEWINDER® 30

A revolution in design!

www.hawkeoptics.com





Hawke and Sidewinder are registered trademarks. SR reticles are registered designs © Hawke Optics US Patent Nos. 29/230,616 European registration Nos. 000 262 795-001-004

#### Reticle Illumination

The Sidewinder has a precision glass etched illuminated reticle fitted as standard. The reticle can be illuminated either red or green. There are five illumination brightness settings for each colour.

The fist three settings (1-3) are dedicated night settings. These have been specifically designed for shooing in low light conditions when little illumination is required.

The remaining settings (4&5) are specifically deigned for daytime shooting. These settings are designed for normal daytime conditions being very useful when shooting into dark backgrounds such as hedgerows. Please note some settings may not be visible during very bright daylight.

The reticle illumination adjustment dial is positioned on the side wheel focus knob. To alter the illumination, rotate the knob to the desired setting.

The first sign of the battery becoming low is indicated by thegreen illumination ceasing to work. At this stage, you should consider replacing the battery. The battery compartment is positioned on the end of the illumination control. Replace the battery using a CR2032 3V Lithium battery (Hawke code BA7800)

CR2032 3V
Lithium battery
installed + up

## **Reticle Types**

Depending on the model you have purchased, your scope will be fitted with one of the following high performance glass etched illuminated reticles.

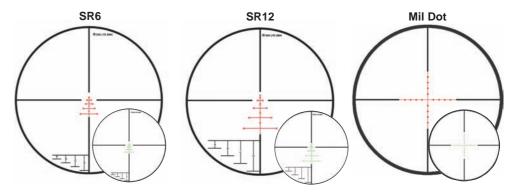
SR reticles have been designed to work with your rifle's trajectory. They can be used in

conjunction with the FREE Hawke Ballistic Reticle Calculator (BRC) Software. This enables easy set-up of the additional aim points, and other advantages such as flip-up lens cover

print-outs. For BRC information, please see the following page.

Z.

DEWINDE



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## Zoom (magnification)

Sidewinder riflescopes feature a true 4X optical system allowing a magnification increase of 4X. To alter the magnification of your Sidewinder riflescope, rotate the zoom ring positioned forward of the eyebell.

Please note: although the zeroed Point Of Impact will not change when you change the magnification, other additional aim points will alter due to the reticle being positioned in the second focal plane.





#### Sunshade

High performance lens coatings are used on all of the Sidewinder lenses. Internal tubes are coated to ensures that any stray light/reflections are kept to a minimum.

However, on extremely sunny days, or when shooting over highly reflective surfaces (standing water / snow) we recommend using the supplied 100mm long sunshade.

To use, simply screw the threaded end into the objective bell of the rifle scope.



#### Screw-In Lens Covers

The Sidewinder is supplied with screw-in lens covers, designed to protect the lenses when not in use.

When fitting the sunshade the screw in lens covers need to be removed first. The screw-in lens covers will not fit the sunshade.



# **INSTRUCTIONS FOR USE**

# WARNING: NEVER LOOK AT THE SUN WITH THIS RIFLESCOPE - IT MAY PERMANENTLY DAMAGE YOUR EYES.

#### **STEP 1 - Ocular Lens Adjustment:**

Because each human being has different eye characteristics, riflescopes are made to have adjustable eyebells. The Sidewinder 30 range features a fast focus ocular adjustment with the additional feature of a lock ring.





To focus your personal eye characteristics to the riflescope, thus giving a crystal clear picture of the reticle, carry out the following adjustment.

Hold the scope about three or four inches from your eye and look through the eyepiece at a featureless, flatly lit, bright area such as a wall or open sky. If the reticle is not sharply defined, loosen the eyebell lock-ring and turn the eyepiece (either direction) a few turns. Quickly glance through the scope again. If the focus has improved, but is still not perfect,

continue focusing. When the reticle appears in sharp focus, retighten the lock-ring. The lock ring is a unique feature to the Hawke SideWinder, that helps prevent unnecessary adjustment either out in the field or by a third party

## **STEP 2 - Mounting the riflescope:**

CAUTION: Be sure that the firearm is NOT loaded. Always practice safe firearms handling

Always check that the diameter of the riflescope body tube matches the diameter of the scope mounts that you wish to use. The Sidewinder has a 30mm 'mono' body tube, therefore 30mm mounts are required.

Purchase the best mounts that you can afford making sure that the base of the mount will fit your rifle.

Hi-recoil rifles, such as spring air rifles may require mounts to be fitted with recoil stop pins.

Fix the mounts to the rifle mount base - do not tighten the mounts. Lay the riflescope into the mounts. The scope should be mounted as low as possible without touching either the barrel or the receiver. Before tightening the mount rings, look through your scope in your normal shooting position. Adjust the scope (either forward or backward) until you find the furthest point forward (to ensure maximum eye relief) that allows you to see a full field of view. Rotate the scope in the rings until the reticle pattern is perpendicular to the bore and the elevation turret is on top. Then tighten the mounting screws, tightening each side evenly.

WARNING: AVOID OVER-TIGHTENING THE RINGS. THIS CAN DAMAGE THE SCOPE AFFECTING PERFORMANCE OR RENDERING IT INOPERABLE.

BE SURE THAT THE SCOPE IS MOUNTED FAR ENOUGH FORWARD - ITS REARWARD MOTION MAY INJURE THE SHOOTER WHEN THE RIFLE RECOILS.

#### STEP 3 - Zeroing the riflescope

#### WARNING: ALL SHOOTING SHOULD BE CARRIED OUT AT AN APPROVED RANGE OR OTHER SAFE AREA. EYE AND EAR PROTECTION IS RECOMMENDED DURING THE PROCEDURE.

The Sidewinder 30 is fitted with 1/4 MOA push/pull locking turrets.

ELEVATION TURRET

WINDAGE TURRET

#### 1/4 MOA Turrets

Each click of adjustment is known as a 1/4 minute of angle (1/4 MOA). This means that one click of movement closely equates to 1/4" of movement on a target set at 100 yds distance. Therefore at different ranges, each click of adjustment changes:

50 yds = 1/8"

100 yds = 1/4"

200 yds = 1/2"

300 yds = 3/4"

The Sidewinder turrets are factory preset in the centre of the FOV (Field of View). The reticle needs to be adjusted to the 'zero' distance of the rifle on which it is mounted.

Before adjusting the turrets, you must first unlock them. This is done by pulling them out, so that they click whilst they rotate. The turrets can than be adjusted until they are on zero. To lock the turrets, simply push them back down.





When a satisfactory zero is achieved, the turrets can be reset. To do this, simply loosen the hex screw on the top of the turrets and then pull the turrets up to their furthest extent. The turrets will then rotate without clicking. Adjust to the '0' zero point, push the turrets down to locate into the locked position and re-tighten the hex screw.





# **OPERATION AND FEATURES**

To get the most out of your new riflescope we recommend that you read the following, in addition to the 'instructions for use' so you fully understand all of the features and how they operate.

- Side Wheel Parallax

- Big Wheel Pointer

- Zoom Magnification

- Sunshade and lens covers

- Reticle Illumination

- Reticle types -

- BRC Software

Side Wheel Parallax - Parallax correction:

To be parallax free, the target must be at the distance equal to the scope focus. Any other distance will cause parallax error, which manifests itself as apparent movement of the reticle against the target. The Sidewinder is equipped with side wheel parallax. To adjust the range setting of the scope, rotate the side wheel focus knob to the distance you want to shoot. When the image is sharp, the correct parallax setting is achieved. On higher magnification it is easier to determine whether the image is in or out of focus. Once the image is in focus the distance can be read on the side wheel scale. This can successfully be used to 'range find' the target.



For more accurate range finding and more sensitive operation, the supplied 100mm big wheel can be used. The scale on the Big wheel is spaced out more, therefore it is easier to determine the exact distance/parallax free setting.

#### Installing and Resetting the Scale on the Big Wheel

To install the big wheel, first of all you need to loosen the three screws on the rear of the wheel and the three hex (grub) screws on the inner ring. DO NOT FULLY REMOVE THE SCREWS. Once these screws are loosened the inner rubber ring should rotate. Please ensure for set—up that it is loose and rotating.

Align the 'teeth' of the side wheel focus knob and the reticle brightness control. Then slide the big wheel completely past the brightness control and onto the side wheel focus knob.

When located, rotate the scale until the yardage on the big wheel matches the scale on the inner focus knob.

Once aligned carefully remove the big wheel, keeping the scale in the same position Tighten up the three screws on the rear of the wheel.

Position the wheel back on the focus knob and tighten the three small grub screws. Please note these should not be over tightened.

To read the scale on the Big Wheel we recommend using the Big Wheel pointer. To install, place the pointer around the body tube, at your preferred position.

1. Large wheel 2. Pointer

